CHAPTER 8: DRUM SECTION

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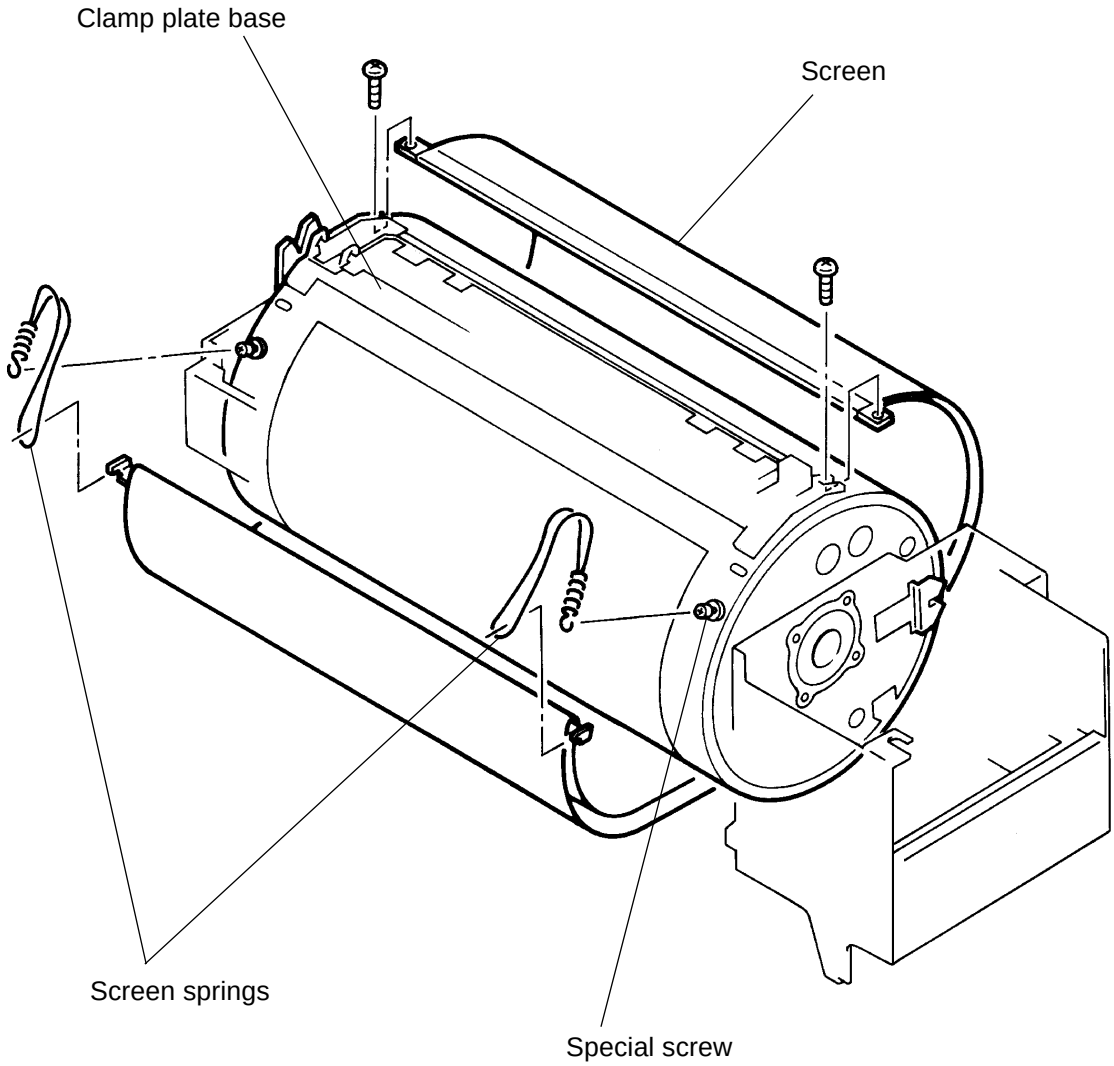
2. Removal and Assembly

1. Screen

1. Make a confidential master on the Drum.
2. Remove the Drum from the machine.
3. Remove the two Screen springs.
4. Remove two mounting screws (regular screws) of the Clamp plate base which are also holding down the Screen on the Drum.
   Do not loosen the two Special screws which are also on the Clamp plate base.
5. Pull out the Screen from under the Clamp plate base, and remove the Screen.

Precaution in Assembly

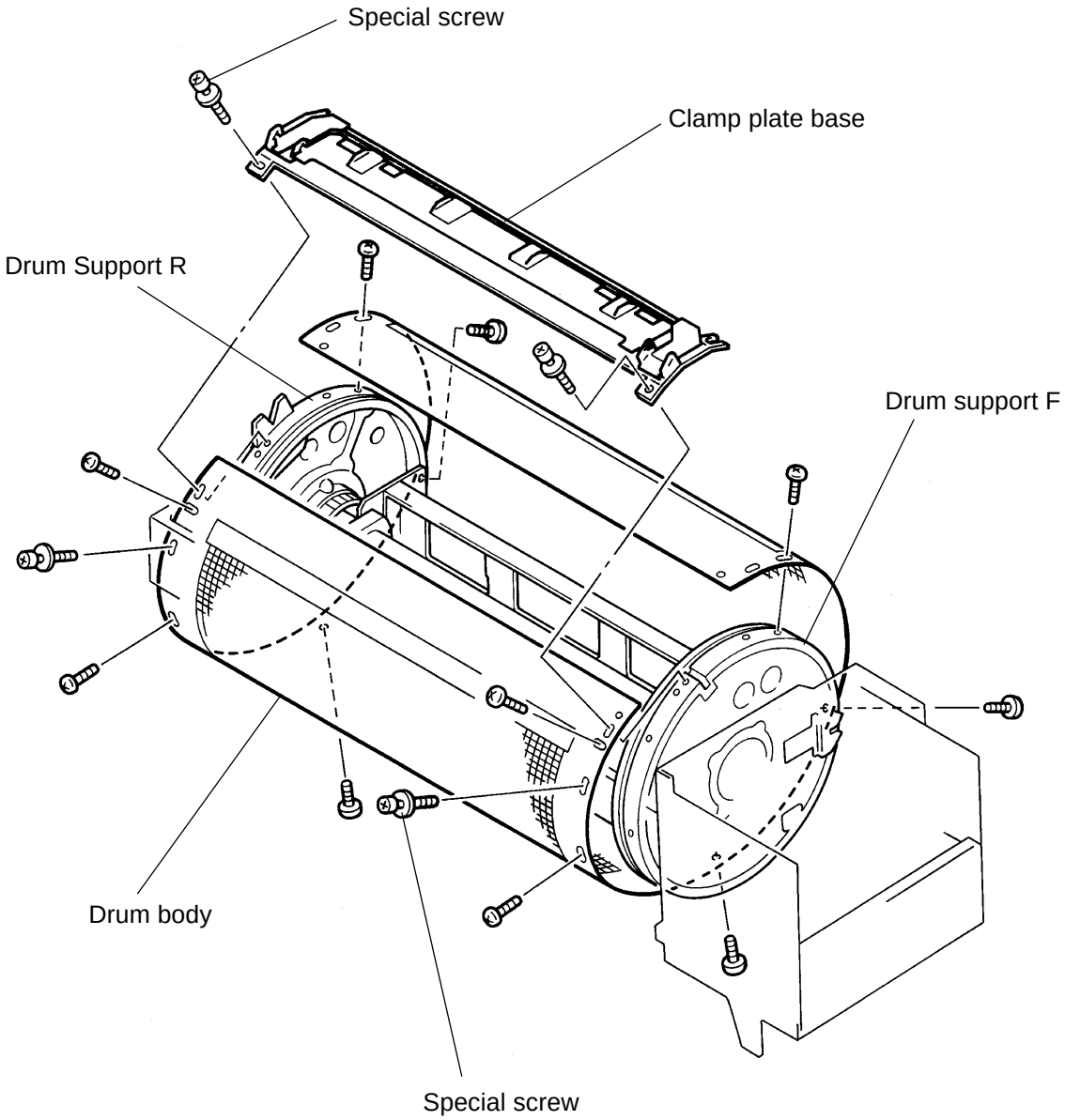
- Do not bend, wrinkle or damage the Screen.



2. Drum Body

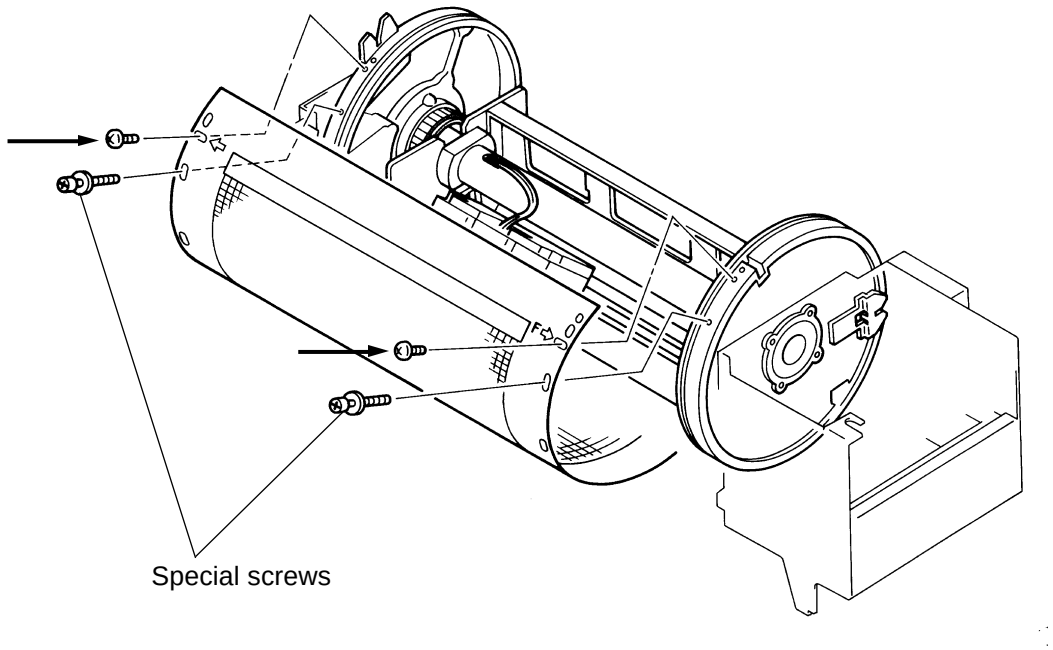
1. Make a confidential master on the Drum.
2. Remove the Drum from the machine.
3. Remove the Screen from the Drum. (page 8-9)
4. Remove two Special screws from the Clamp plate base and remove the base.
5. Remove remaining ten regular mounting screws and two more Special screws holding the Drum body to the Drum body support F and R.
6. Separate the Drum body from the Drum body supports, carefully to avoid damaging the Drum body.

(refer to page 8-11 for the "Precaution in Assembly")

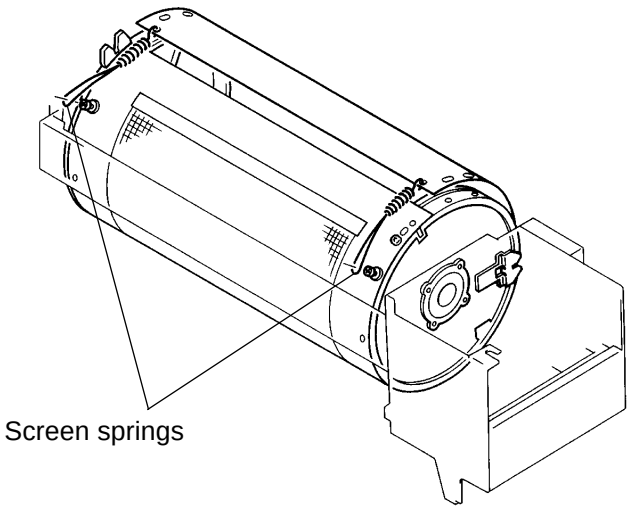


Precaution in Assembly

- Do not bend or damage the Drum body.
- The Drum body has ⇦ and ⇨ marks with **F** engraved next to one of the two arrow marks. The **F** mark indicates the "front" (Operation panel side).
- Mount screws on the two holes marked ⇦ and ⇨ first. Then mount the two Special screws next to the first two screws.



- After the first and second set of the screws are in, temporary hook the Screen springs in the manner shown by the illustration below. This is to pull and fit the Screen evenly on the Drum supports F and R.



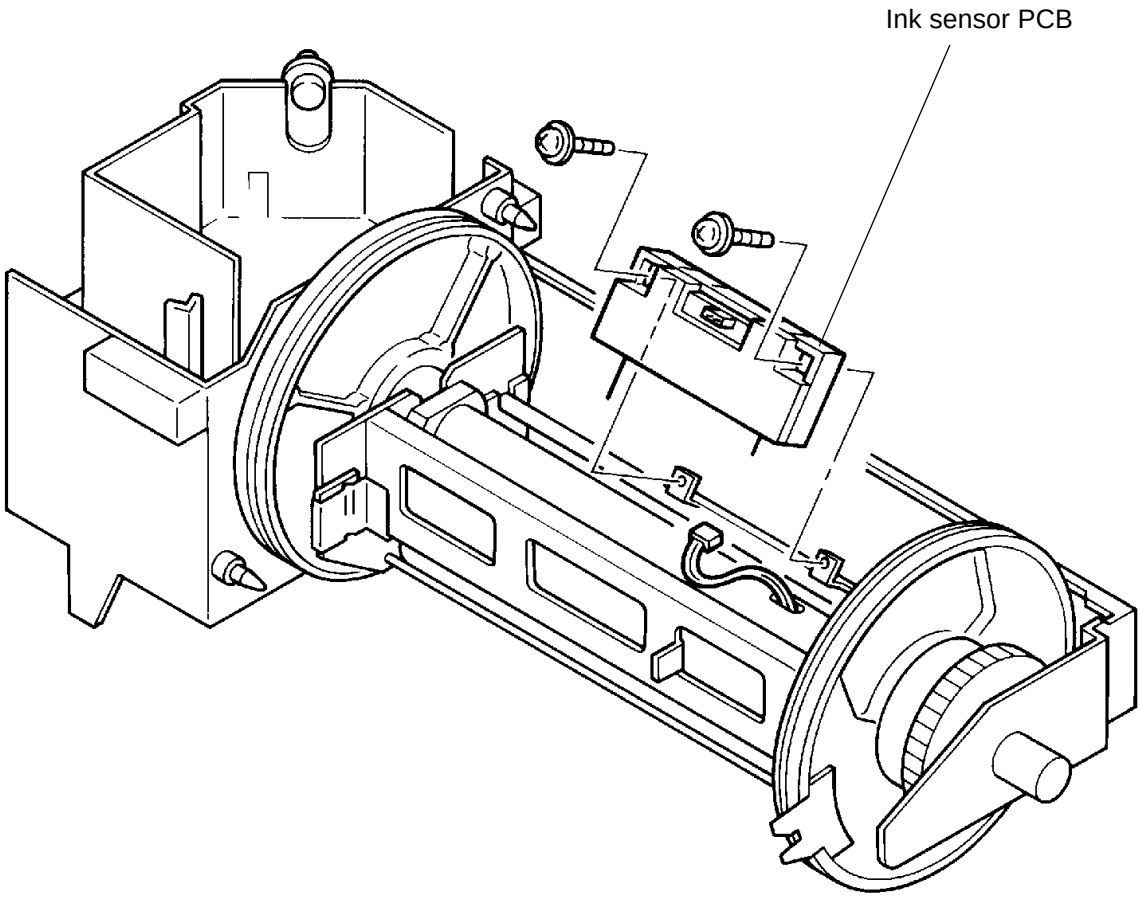
- Mount the remaining screws and remove the two temporary mounted Screen springs.
- Mount the last two remaining screws and hook the Screen springs to complete the assembly. If necessary, refer to the previous page to check how the springs were hooked on the Drum.

3. Ink Sensor PCB

1. Make a confidential master on the Drum.
2. Remove the Drum from the machine.
3. Remove the Screen. (page 8-9)
4. Remove the Drum body. (page 8-10)
5. Disconnect the Connector of the Ink sensor PCB.
6. Remove two mounting screws of the Ink sensor cover and remove the cover with the PCB in it.
7. Remove Ink sensor PCB from the Ink sensor cover.
   CAUTION:
   Use special caution not to break or bend the two sensor antennas.
   If they are bent, straighten them out with fingers.

Precaution in Assembly

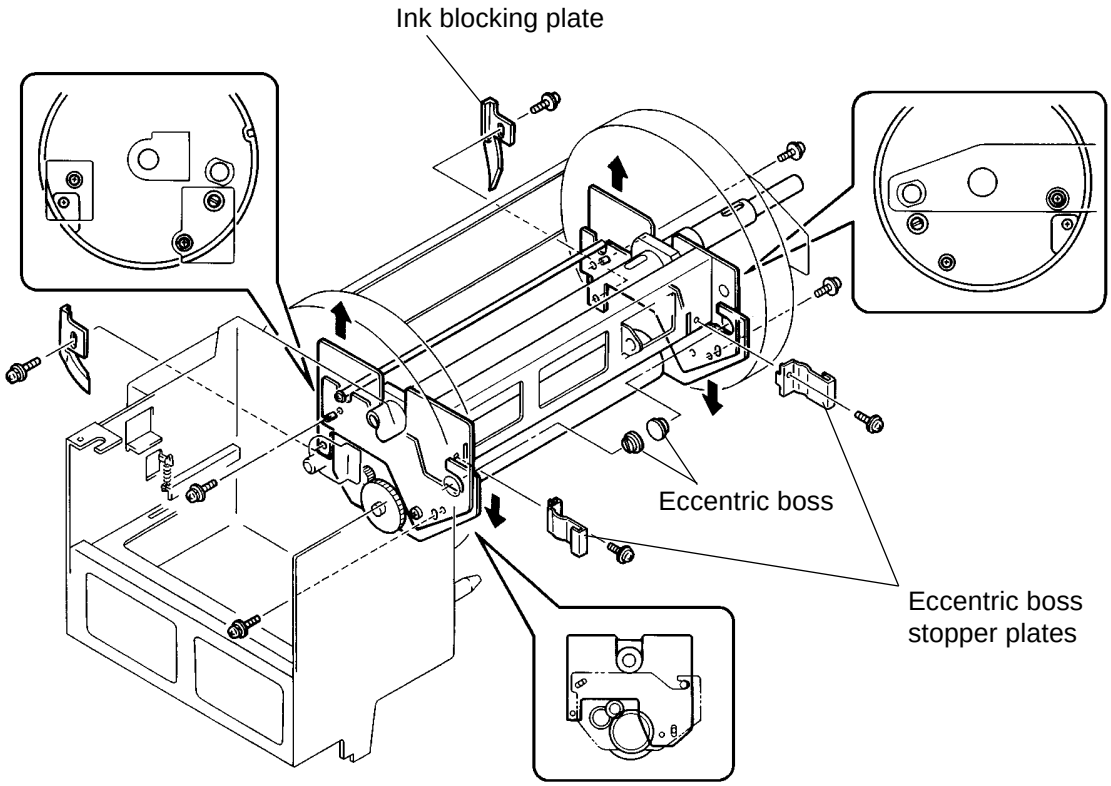
- The Ink sensor and Overflow sensor antennas should both be standing at a right angle (90°) to the PCB.
- The two antennas must not be touching the Doctor roller or Driven roller.



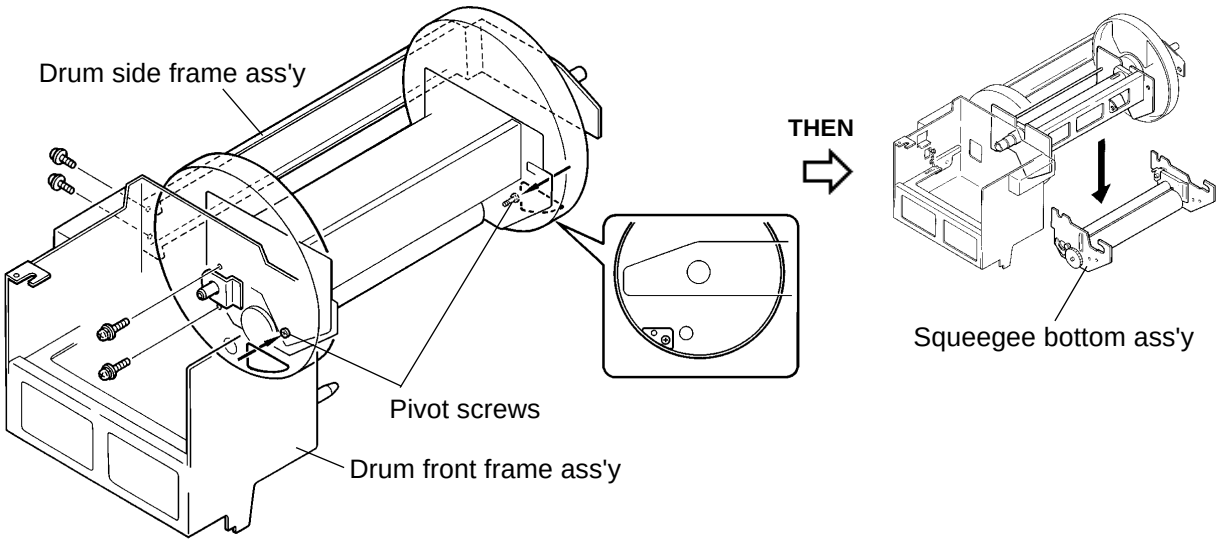
4. Squeegee Roller

1. Make a confidential master on the Drum.
2. Remove the Drum from the machine, and remove Ink pack from the Drum.
3. Remove following parts from the Drum.
   - Drum cover
   - Ink pack holder ass'y. (page 8-20)
   - Ink pump unit (page 8-18)
   - Screen (page 8-9)
   - Drum body (page 8-10)
   - Ink sensor PCB (page 8-12)
4. Lock the Drum at Position-B.
5. From the holes on the Drum supports F and R, remove two mounting screws each from the Squeegee frames on both ends.
6. From the holes on the Drum supports F and R, remove mounting screws of the two Eccentric boss stopper plates and remove the plates.
7. Remove the two Eccentric boss.
8. From the holes on the Drum supports F and R, remove mounting screws of the two Ink blocking plates, and remove the blocking plates.

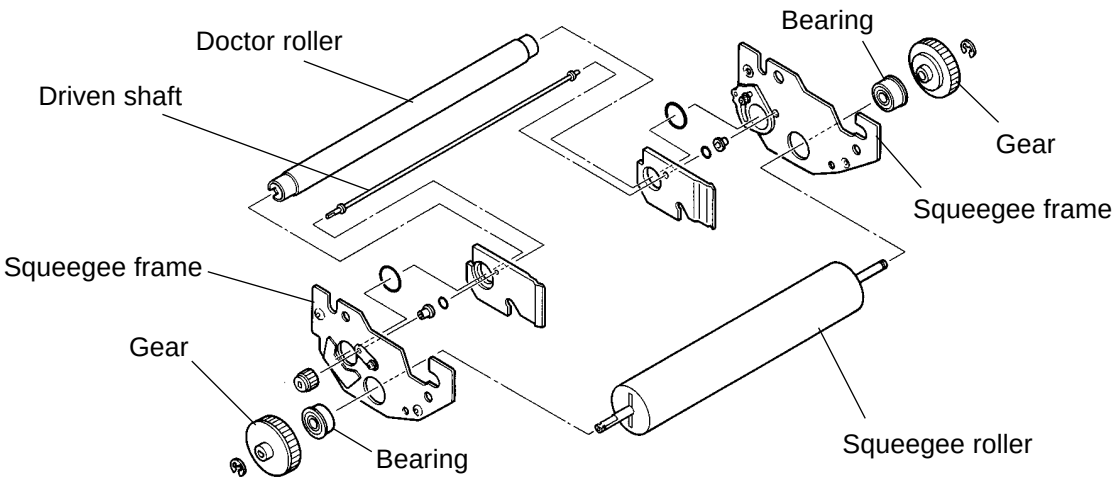
(continues on page 8 - 14)



9. Remove two screws from the Drum side frame ass'y and two screws from the Drum front frame ass'y.
10. From the holes on the Drum supports F and R, remove two Pivot screws.
11. Remove the Squeegee bottom assembly from the Squeegee unit.



12. Remove two E-rings from the ends of the Squeegee roller and remove the gears and bearings.
13. Slowly take out the Squeegee roller.
    The Doctor roller and Driven shaft will also come apart from the Squeegee frames.
    CAUTION:
    Four O-rings, of which two are very small, may fall off from the Squeegee bottom assembly when the Squeegee roller is removed. Do not lose these O-rings.



Precaution in Assembly

- Do not forget to return the four O-rings in their original positions.

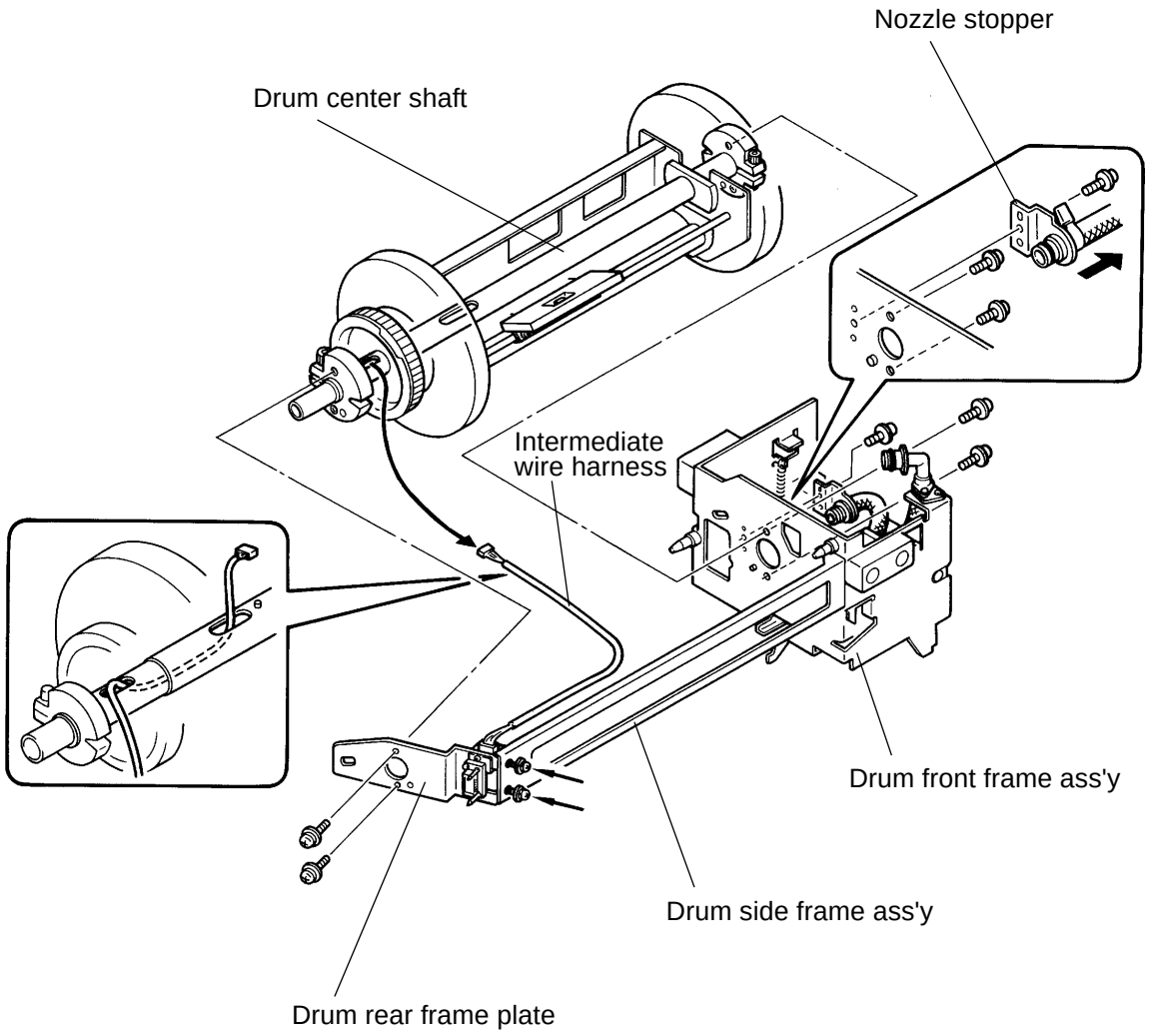
Adjustments after Assembly

- Squeegee gap adjustment. (page 8-21)
- Squeegee pressure Balance. (page 8-22)
- Ink blocking plate position. (page 8-23)

5. Drum Support F & Drum Support R

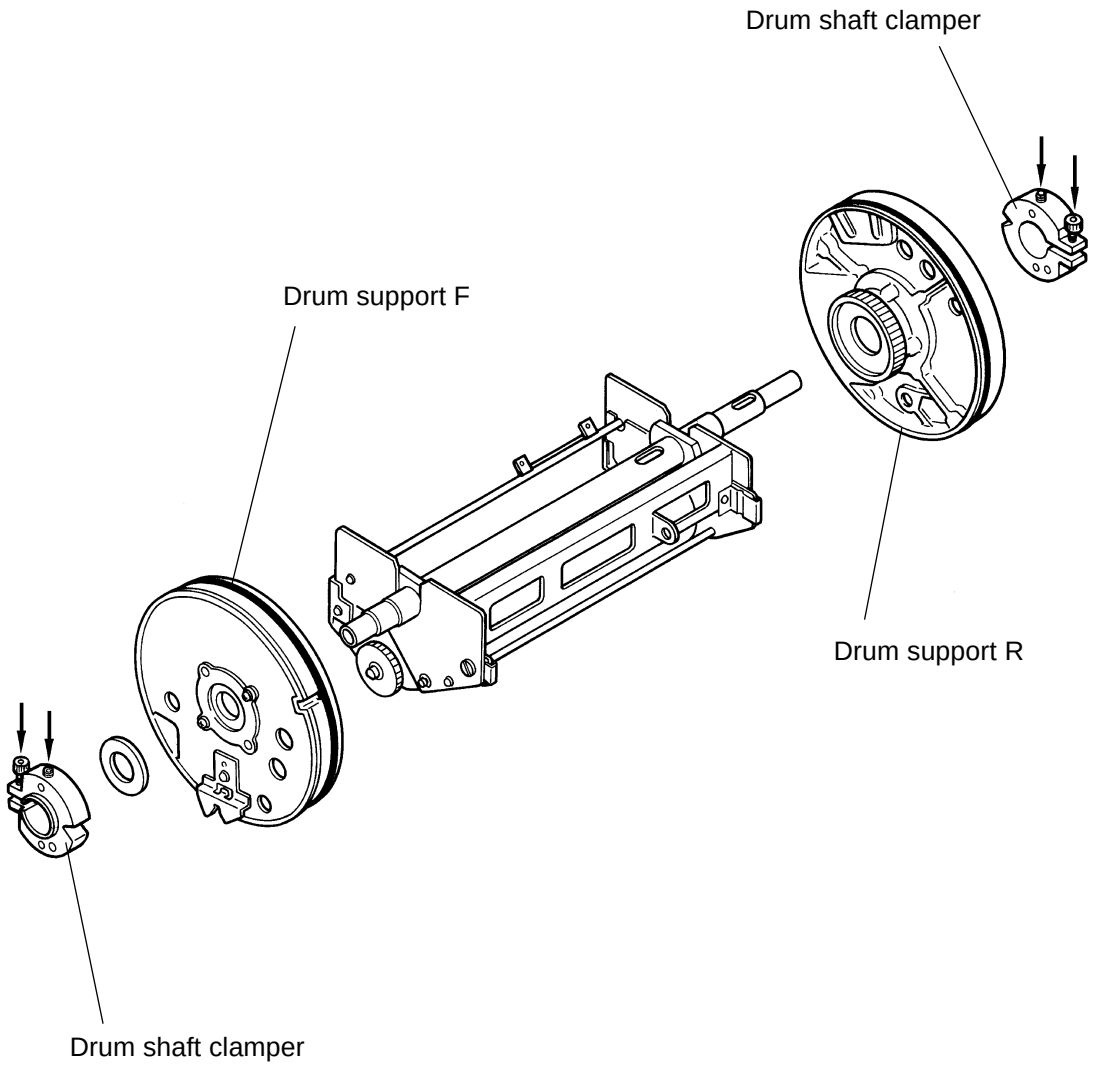
1. Make a confidential master on the Drum.
2. Remove the Drum from the machine, and remove Ink pack from the Drum.
3. Remove following parts from the Drum.
   - Drum cover
   - Ink pack holder ass'y. (page 8-20)
   - Screen (page 8-9)
   - Drum body (page 8-10)
4. Disconnect the Connector of the Ink sensor PCB, and pull out the Intermediate wire harness from the Drum center shaft.
5. Remove the mounting screw of the Ink hose nozzle stopper, and remove the nozzle stopper from the Drum front frame ass'y.
6. Pull out the Ink hose from the Drum center shaft.
7. Remove two mounting screws of the Drum front frame ass'y.
8. Loosen the two screws on the Drum side frame ass'y.
9. Remove two mounting screws from the Drum rear frame plate and remove both the Drum rear frame plate and Drum front frame ass'y from the Drum center shaft.

(continues on page 8 - 16)



10. Loosen two set screws on each Drum shaft clampers, and remove the clampers from the Drum center shaft.
11. Remove the Drum support F and Drum support R from the Drum center shaft.

(continues on page 8 - 17)

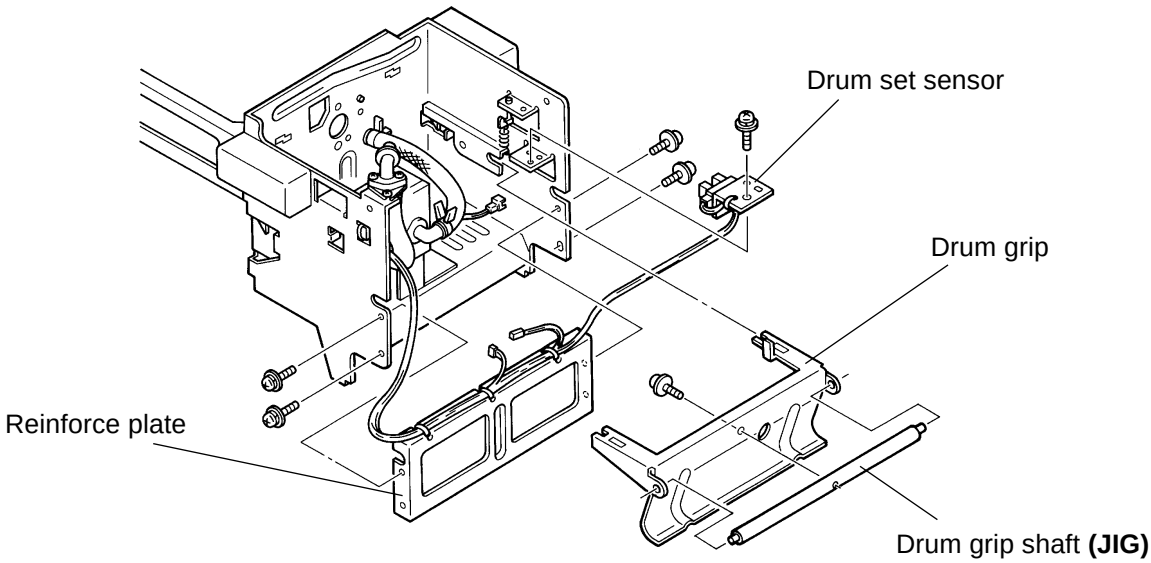


Precaution in Assembly

• A 18" x 3/8" Wooden Dowel is a very effective JIG when tightening the Drum shaft clampers. If such a dowel is not avaiable, use the Drum grip shaft as a **JIG** to set the position.

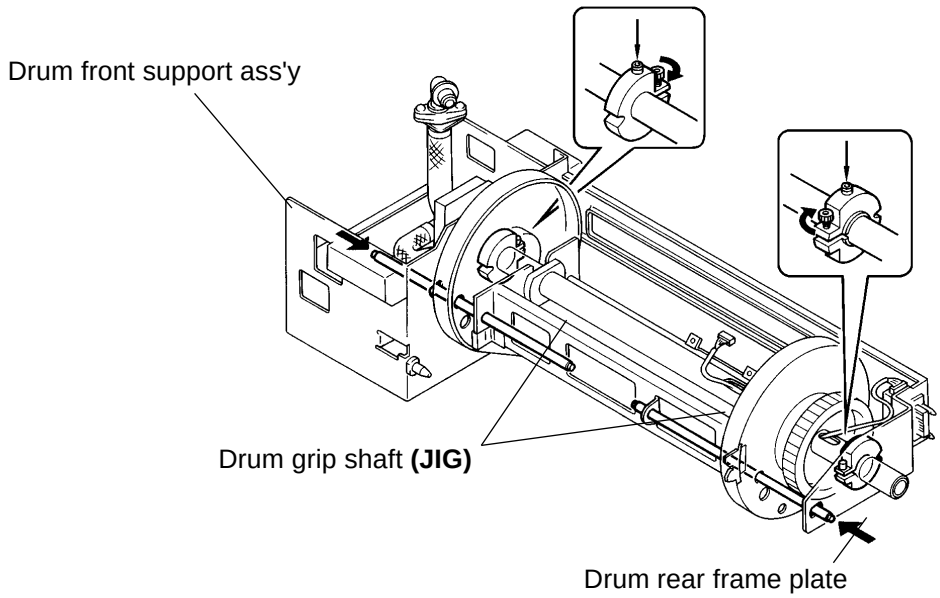
Removing the Drum grip shaft

1) Remove four mounting screws of the Reinforce plate and remove the plate.
2) Remove mounting screw of the Drum set sensor bracket and remove the bracket.
3) Remove the Drum grip.
4) Remove mounting screw of the Drum grip shaft and separate the shaft from the Grip.



Precaution in Assembly **(continued from above)**

• Bring the Drum to the Position-B.
Tighten the Drum shaft clamper on the rear of the Drum with two set screws after placing the **JIG** through the holes on the Drum rear frame plate, Drum support R, and Drum side frame ass'y.
Then place the JIG through the holes on the Drum front support ass'y and Drum support F, and tighten the Drum shaft clamper on the front of the Drum with two set screws.

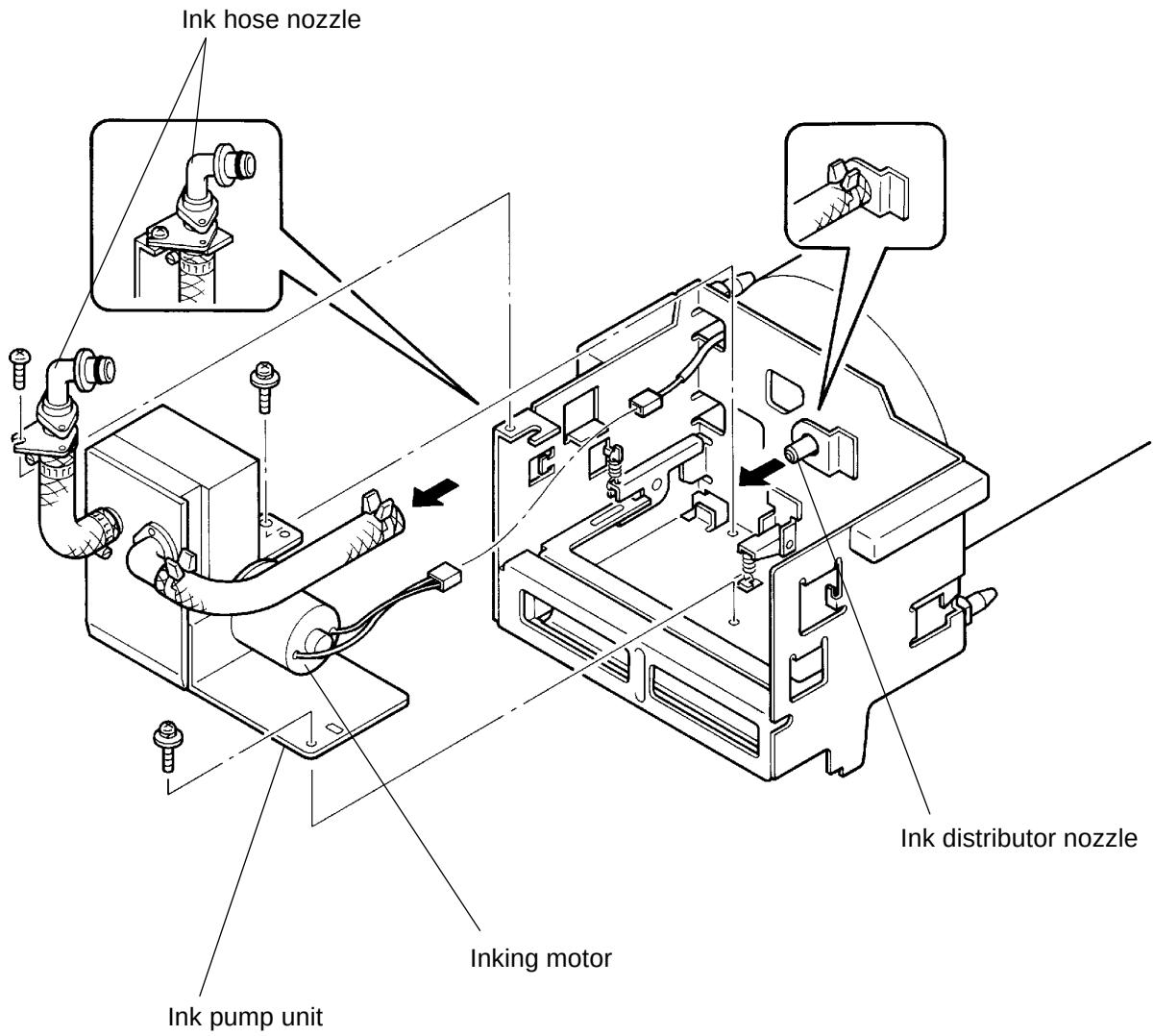


6. Ink Pump Unit

1. Remove the Drum from the machine.
2. Remove the Ink pack from the Drum.
3. Remove the Drum cover.
4. Disconnect the Connector of the Ink pack set sensor.
5. Remove two mounting screws of the Ink pack holder ass'y and remove the holder ass'y.
6. Remove mounting screw of the Ink hose nozzle and slide out the nozzle from its holder, and set the Ink hose aside.
7. Pull out the other Ink hose from the Ink distributor nozzle.
8. Disconnect the Connector of the Inking motor.
9. Remove two mounting screws of the Ink pump unit and remove the pump unit.

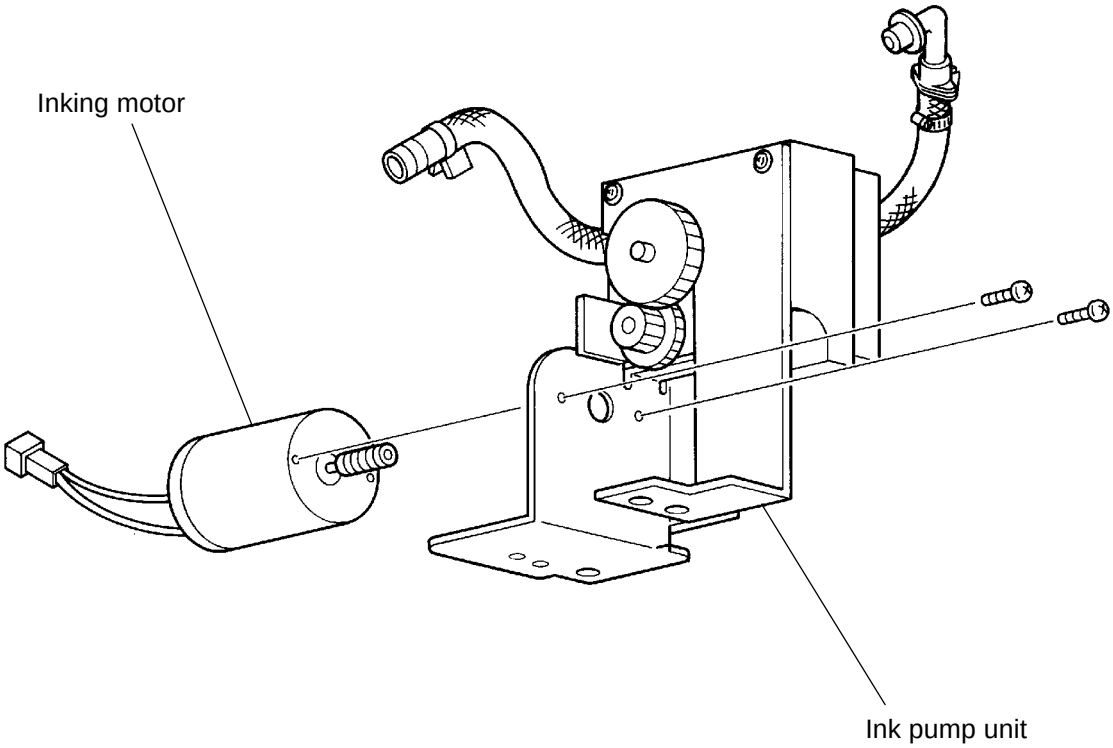
Precautions in Assembly

• Match the half-pierced section of the Ink pump unit with its counter part.



7. Inking Motor

1. Remove the Drum from the machine.
2. Remove Drum cover.
3. Remove Ink pump unit. (page 8-18)
4. Remove two mounting screws of the Inking motor and remove the motor.



8. Ink Pack Set Sensor

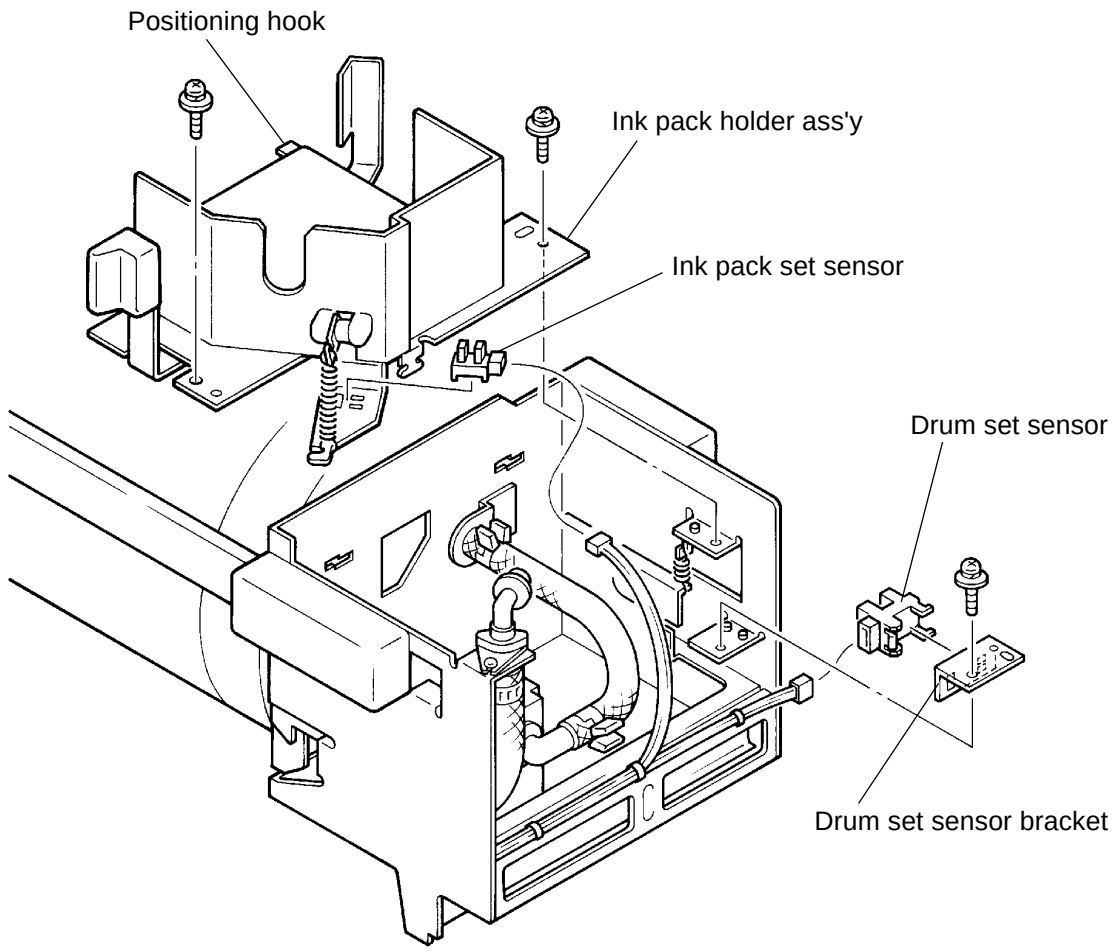
1. Remove the Drum from the machine.
2. Remove the Ink pack from the Drum.
3. Remove the Drum cover.
4. Disconnect the Connector of the Ink pack set sensor.
5. Remove two mounting screws of the Ink pack holder ass'y and remove the ass'y.
6. Remove the Ink pack sensor from the sensor mount.

Precautions in Assembly

- Match the half-pierced section of the Ink pack holder ass'y with its counter part and make sure that the positioning hook is correctly inserted in position.

9. Drum Set Sensor

1. Remove the Ink pack holder ass'y referring to above instruction.
2. Remove the mounting screw of the Drum set sensor bracket and remove the bracket.
3. Disconnect the Connector of the Drum set sensor and remove the sensor from the bracket.

Precautions in Assembly

- Match the half-pierced section of the Drum set sensor bracket with its counter part.
- Match the half-pierced section of the Ink pack holder ass'y with its counter part and make sure that the positioning hook is correctly inserted in position.